Application No. 10/615,794   Docket No.: YOR920030059US1
Request for Reconsideration dated July 24, 2007   Attorney Docket No. 20140-00302-US
After Final Office Action of May 24, 2007

REMARKS

The following remarks are made in response to the Office Action mailed May 24, 2007. In the Office Action, the Office has rejected claims 16-26 under 35 U.S.C. §103(a) as outlined in Items 1-9 on pages 2 and 3 of the Office Action. Applicants request reconsideration based on the following remarks.

The claimed method involves operating a plating bath at a VFM ratio (VMF divided by the concentration (C) of accelerator) such that the VFM ratio is at the VFM threshold ratio which is the highest VFM ratio at which no voids are observed. This method does not require the VFM value, the C value or the VFM ratio (VFM/C) to be constant. The values of VFM, C and thus VFM ratio are varied depending upon the VFM threshold value (i.e., the highest value of the VFM ratio with no voids). This flexibility of varying the VFM ratio provides for minimizing or eliminating the number of voids during the plating process.

As the Office notes on page 4 of the Office Action, Kopp (U.S. Patent No. 6,083,374) maintains a constant C and Seita et al. (U.S. Patent No. 6,881,374) maintains a constant VFM value. Accordingly, the combination of Kopp and Seita would give a constant VFM/C value (VFM ratio). The combination of these references requires that the VFM ratio be constant regardless of the number of voids. Therefore, the number of voids cannot be minimized or eliminated by varying the VFM ratio. In essence, Kopp and Seita teach away from the claimed method because they require the VFM and C values to be constant whereas the claimed method provides for these values to vary depending upon the number of voids being detected.

Eliminating or minimizing the number of voids by determining the best VFM value alone or the best C value alone is not the same as eliminating or minimizing the number of voids based on a ratio of these values. If one skilled in the art were to find the best VFM value based on Seita and the best C value based on Kopp, the resulting constant VFM/C ratio (VFM ratio) would not be necessarily give a VFM ratio which minimizes or eliminates the number of voids. The combination of Kopp and Seita does not allow for the VFM/C value to vary depending upon the threshold value (the maximum VFM ratio value with no voids).

The combination of Kopp and Seita simply does not teach or suggest the recited method steps in operating a plating bath. Accordingly, the claimed method would not have been rendered unpatentable over the combination of Seita and Kopp. Therefore, Applicants respectfully request that the Office withdraw the rejections under 35 U.S.C. §103(a).

In view of the above remarks, applicant believes the pending application is in condition for allowance. Favorable reconsideration is respectfully requested.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0510, under Order No. 20140-00302-US from which the undersigned is authorized to draw.

Dated: July 24, 2007   Respectfully submitted,
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